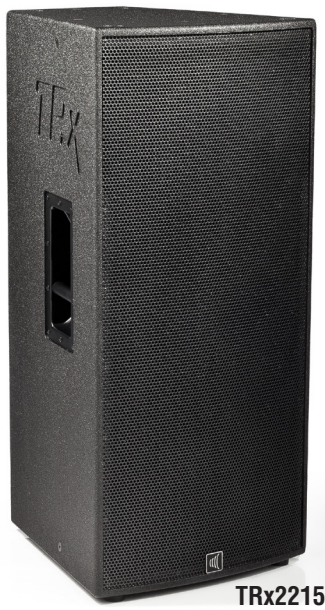
Congratulations on your selection of **TRx** loudspeakers. The Carvin Audio **TRx 2000A** Active series loudspeakers are a high performance solution for bands, audio companies and concert venues with point source and monitor solutions to provide the best sound at high SPL levels.

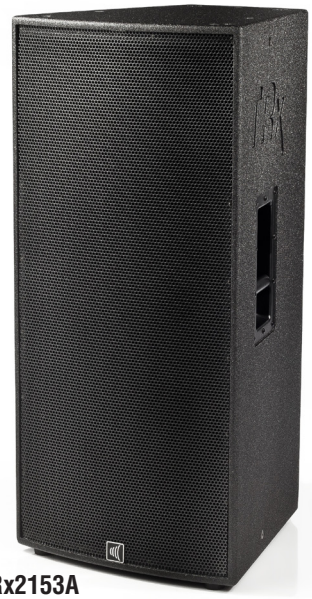
These systems are designed for today's pro audio applications and feature the latest innovations for optimal performance of both live and recorded music playback. The amp module features **X-Drive**™ DSP equalization, crossover, limiting and alignment delay processing. The bullet-proof DCM power amp technology is housed in a fan ventilated, internally sealed aluminum structure for solid construction and durability. The enclosures are made from road worthy multi-ply Baltic Birch covered in weather and UV resistant Duratec™ coating with steel powder coated grills. Handles, pole mounts, internally braced fly points provide reliable means for transport, suspension and set-up. The systems feature high power castframe 15-inch woofers with 3-inch voice coils and 1.4-inch exit, 2.5-inch voice coil titanium HF drivers for continuous high peak power.

TRx MADE IN USA



TRx2215A

TRx2115A



TRx2153A

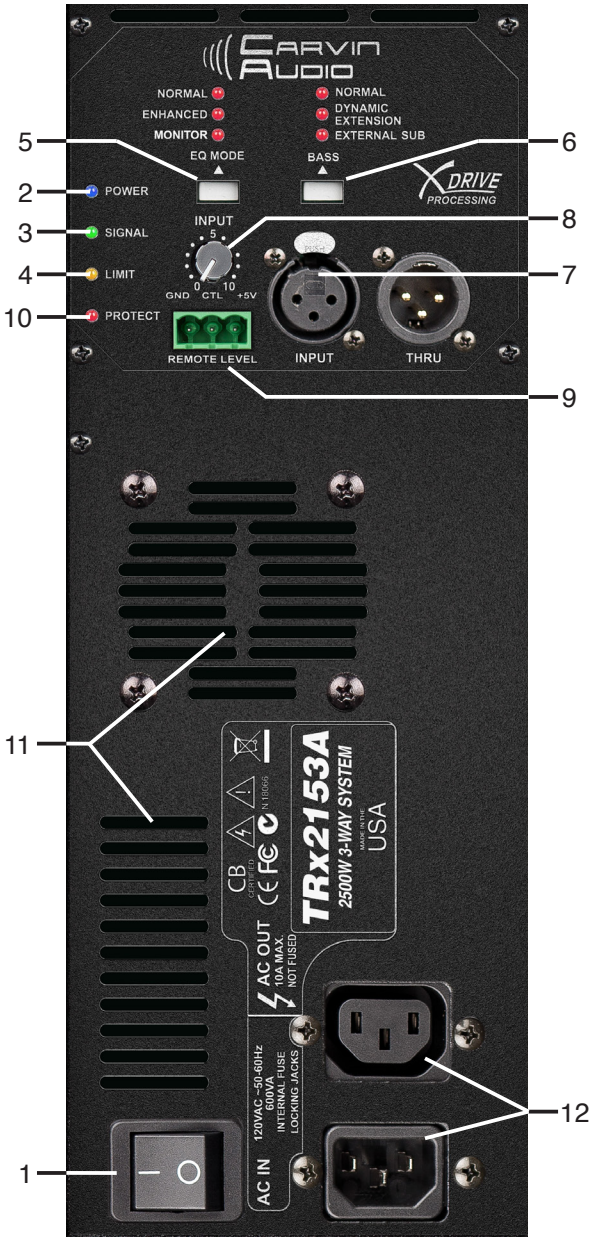
The **TRx2115A** is an active biamp multi purpose Main or Monitor enclosure. The compact trapezoidal design and 80x50 degree HF horn allows multiple cabinets to work together as array clusters. The 32 degree monitor tilt angle and 80 degree vertical HF dispersion provide powerful stage monitoring from 2 to 15 feet. The woofer is driven by a bridged amplifier for excellent punch and definition. A pole mount and 8 fly points offer a variety of suspension options.

The **TRx2215A** is our most powerful active triamp full range enclosure with three amplifiers driving dual 15-inch woofers and a 1.4-inch HF driver enabling it to be used as a standalone system. The trapezoidal design and 80x50 degree HF horn enables great coverage and wider coverage with multiple cabinets. Twelve fly points are provided for overhead suspension.

The **TRx2153A** is our finest active triamp 3-way enclosure which features an 8" mid frequency medium throw horn loaded driver, 15" woofer and 1.4-inch HF driver to deliver exceptional sound quality. The trapezoid design with horn loaded mid and 80x50 degree HF horn allow several boxes to be clustered together for wider coverage and higher SPL output. There are 12 fly points for overhead suspension.

CARVIN AUDIO

12340 WORLD TRADE DRIVE SAN DIEGO, CA 92128
800-854-2235 CARVINAUDIO.COM



1. POWER SWITCH (reset)

Push the upper portion of the power switch to turn the system on. If the blue POWER indicator is on but no sound is coming out of the speakers, the amp may have gone into one of its protection modes. To reset, turn the power off for 10 seconds and then turn it back on. If the problem persists, check for a lack of Input signal or a blocked fan intake.

2. POWER LED

The POWER LED indicates the unit is turned on and functioning properly.

3. SIGNAL LED

The SIGNAL LED indicates there is a signal present at the INPUT XLR.

4. LIMIT LED

The LIMIT LED indicates maximum output of the system is being reached. A flashing LIMIT LED is acceptable, the DSP will reduce peaks to help prevent amp clipping. If the LIMIT LED is continuously ON, reduce the level going in to the INPUT XLR. As with any system, reduce the volume if distortion is heard.

5. EQ MODE button + LEDs

The EQ MODE button sets the overall EQ shape for the enclosure.

Select NORMAL, ENHANCED or MONITOR mode as indicated by one of the 3 LEDs.

NORMAL EQ mode is the flat setting best for live sound.

ENHANCED EQ mode is a club or dance playback setting with a minor mid cut and minor bass increase over the flat setting.

MONITOR EQ mode is designed for stage monitoring or when coupling two cabinets together, keeping bass frequencies and microphones under control.

Use MONITOR mode when using the TRx2000A series as a monitor, for side fills or in very small venues.

6. BASS button + LEDs

The BASS mode button sets the BASS response for the enclosure.

Select NORMAL, DYNAMIC EXTENSION, or EXTERNAL SUB as indicated by the 3 LEDs.

NORMAL Bass mode is the flat setting.

DYNAMIC EXTENSION Bass mode extends the low frequency response another 15Hz with a boost in the 35-50Hz range. As the woofers approach maximum output the effect is reduced by the internal limiter, but will make a difference between bass peaks.

EXTERNAL SUB Bass mode rolls off the cabinet at 85Hz to use external subwoofers with your system such as the TRx3018A.

7. INPUT/THRU XLR CONNECTORS

Connect the INPUT XLR to a signal source, such as the output of a mixer.

The THRU XLR can be connected for additional TRx 2000A or 3000A series or other units.

8. INPUT LEVEL

The INPUT level control adjusts the overall volume of the speaker. The normal setting is “10” for maximum sensitivity.

9. REMOTE LEVEL (MUTE) CONNECTOR

This is a terminal block connector with 5 volt control of volume, typically used in permanent installations. Short the CTL and GND pins to MUTE.

10. PROTECT LED

The PROTECT LED indicates one of the protection circuits has activated and no sound will be heard from the amp. To reset the amp, turn the power off for about 10 seconds then turn it back ON. If the PROTECT LED stays lit for more than 5 seconds check for a blocked fan intake.

11. FAN INTAKE/EXHAUST VENTS

The TRx2000A series feature a variable speed fan, which runs silent at low speeds.

Make sure the fan intake and exhaust vents are free from blockage at all times.

12. AC IN/AC OUT POWER JACKS & FUSE

Be sure to plug into the proper voltage using the AC IN jack. A detachable locking power cord is supplied (for European 230V use a CEE-7 plug cord set). Plug the cord into a grounded 3 prong power source. No attempt should ever be made to use the amp without the ground connected. The AC OUT connector can be used to power additional units such as a Trx3018A, powered speaker or any device with 10A or less rating. The FUSE is located internally near the AC input. To check or replace the fuse, first **remove the power cord** and then remove the amp module from the speaker enclosure and then remove the front panel to access the fuse. The fuse type is a 250V Slow Blow rated at 15A.

A locking AC cord (Carvin part# 120V16L7 120V model) is supplied. However, a standard AC cord can be used. To detach the cord from the unit, press the release lever on the side of the cord.

LOCKING AC CORD
120V16L7

Suspension and Stacking Information

PRIOR TO SUSPENDING OR STACKING ANY LOUDSPEAKER SYSTEMS, IT IS ESSENTIAL THAT THE USER BE FAMILIAR WITH OVERHEAD SUSPENSION AND STACKING TECHNIQUES, LOAD RATINGS, AND SAFETY CONSIDERATIONS.

SUSPENSION

The TRx series loudspeakers are fitted with captive 3/8"-16 threaded receptacles for suspension or permanent installation. Each captive nut has a WLL of 500 lbs. (226 kg.).
Note: Working Load limits are based on vertical pull or 0°. For derating please see the derating notes below.

DE-RATING: Using the mounting points at an angle will de-rate the "WLL" (working load limit) for each point. Each point mounted at an angle should be de-rated according to the following formula.

"WLL"=cosine(angle) x 500 lbs
angle = degrees form vertical pull
500 lbs = WLL for each TRx mounting point @ vertical pull

WARNING – Never exceed the "WLL" throughout the suspension system.

OPTIONAL #TCSHK10
3/8"-16 forged steel eyebolt
WLL=1600 lbs

OPTIONAL #TCSHK58
5/8" forged steel shackle
WLL=6500 lbs

DANGER:

1) Hardware found at your local hardware store should not be used as it may not be rated for this application.
2) Mounting or rigging loudspeakers is a serious endeavor, always seek the advice of qualified experts.
3) Never use the handles for suspending the loudspeaker, they are not designed or rated for this purpose.
4) Improper installations may result in damage, injury or death.

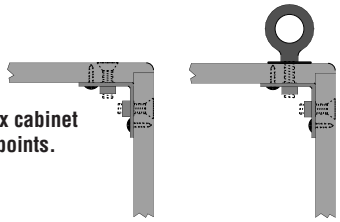
CAUTION: All hardware used for overhead suspension should be designed and used with a minimum 7:1 design factor. This is the ratio between the structural failure point and the loading to be applied to the component. Periodically inspect and maintain all rigging points on the loudspeaker and all suspension hardware.

NOTICE: The user assumes liability for proper design, installation and use of rigging systems.

IMPORTANT NOTE:

All fly points of the TRx loudspeakers must be occupied with either the original hex screws provided or with mounting hardware (eyebolts).
When the loudspeaker is suspended from one end, the load is transferred through the internal steel bracing to the hex screws in the adjacent wall of the enclosure for structural support. Also, if the holes are not "plugged" this will create air leaks compromising the low frequency performance of the enclosure. Re-check to be sure all hex screws and eyebolts are securely tightened.

Cutaway view of TRx cabinet showing rigging points.



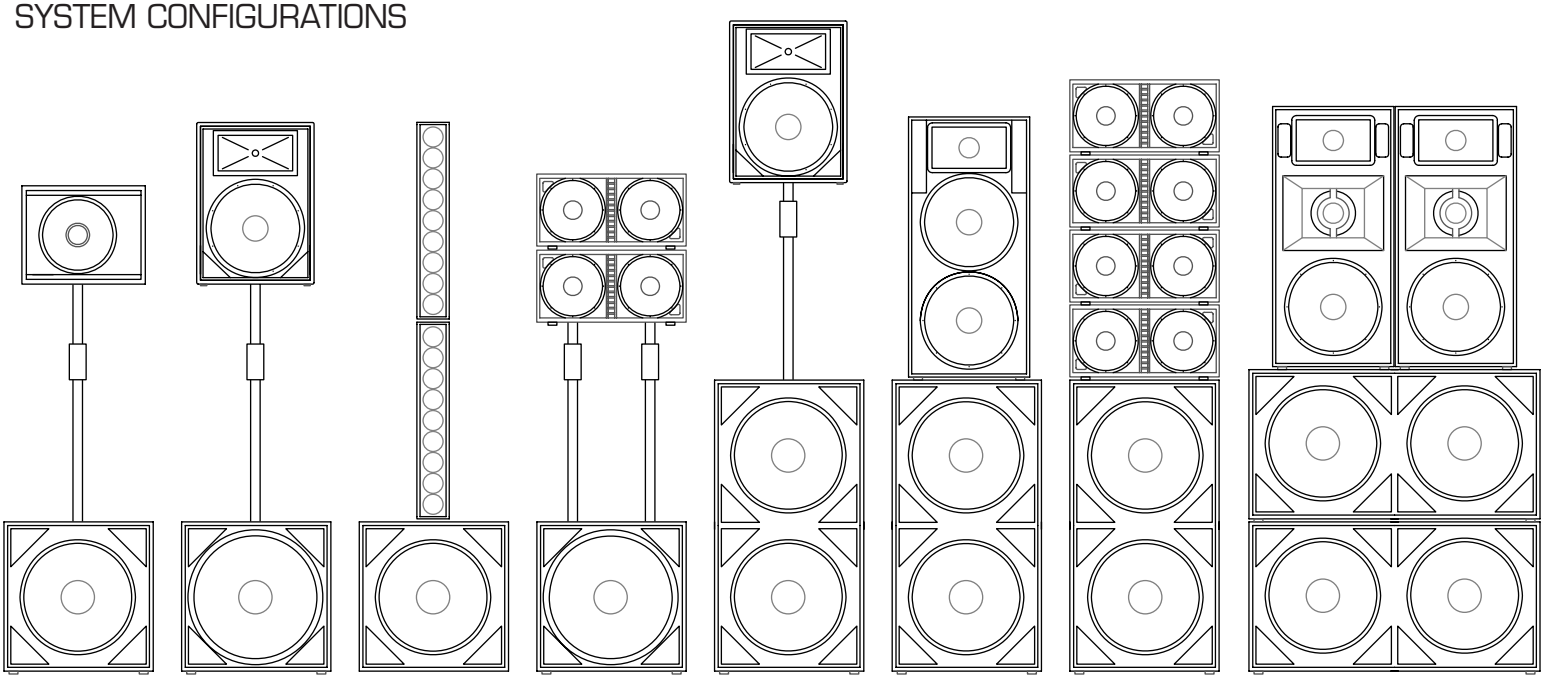
STACKING

Ensure that the floor or stage is level and solid. Be cautious of outdoor windy conditions, speaker stacks could topple over in high wind conditions or be accidentally pushed or bumped over by crowds. Loudspeakers producing very high SPL (especially subwoofers) can shift from their original position. Ensure the feet of the loudspeakers are locked into the feet cups of the speaker below.

SYSTEM SETUPS

The TRx2000 series is designed to offer a large variety of options when configuring a system and can integrate with the TRx3000 series elements such as the TRx3903 column array, TRx3210A Line Array, TRx3018A or TRx3218 subs. As with any system, consideration should be made to match SPL of main and subwoofer cabinets. For instance use two TRx3018A or the dual Trx2218 to keep up with the SPL capability of a single TRx2153A or TRx2215A.

SYSTEM CONFIGURATIONS



TRx12N
SS4 POLE
TRx3018A

TRx2115A
SS4 POLE
TRx2121

(2x) TRx3903
(2x) SS7 POLE
TRx3018A

(2x) TRx3210A
(2x) SS4 POLE
TRx2121

TRx2115A
SS4 POLE
TRx2218

TRx2215A
TRx2218

(4x) TRx3210A
TRx2218

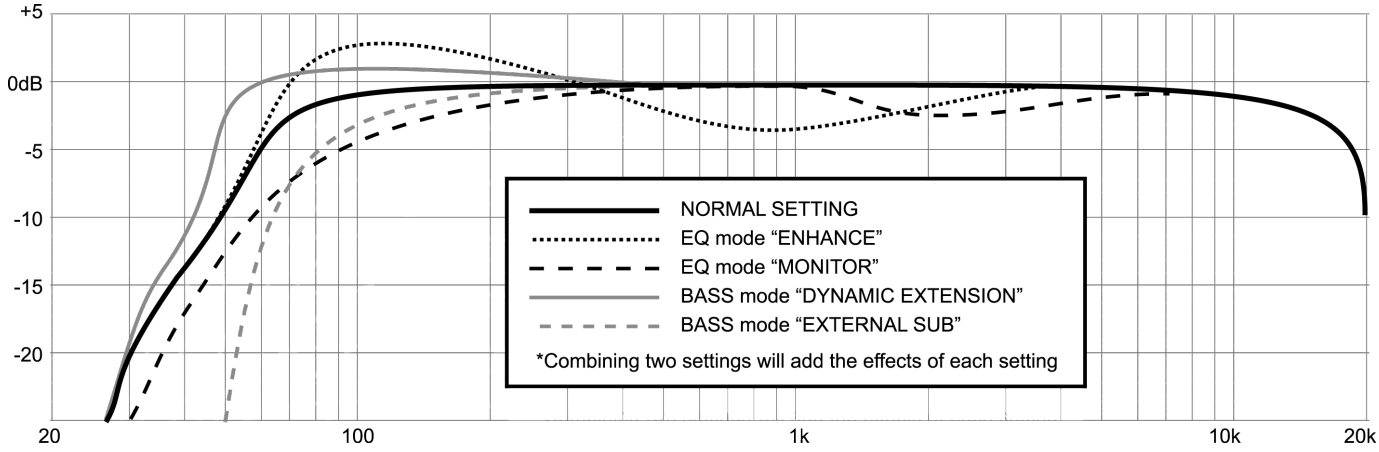
(2x) TRx2153A
(2x) TRx2218

SPECIFICATIONS

TRx2115A	
System Type:	Active 2000W 15-inch 2-Way
Frequency Response:	54 Hz – 20 kHz (-10dB) 62 Hz – 18 kHz (-3dB)
Coverage Pattern:	80H x 50V
Crossover:	Bi-Amp Active DSP
Crossover Frequency:	1.5 kHz
Power total:	3000W two cycle pulse peak 2000W 20ms burst (1500W, 500W) 1500W RMS (1150W, 350W)
Input Sensitivity:	1.4Vrms to full power
Maximum Input signal:	+12dBu
Maximum SPL:	134dB Peak
LF Driver:	15-inch cast frame, 3-inch Voice Coil
HF Driver:	1.4-inch exit, 2.5-inch diaphragm
Enclosure:	13-Ply Premium Russian Baltic Birch
Suspension/Mounting:	1-3/8-inch pole mount cup 8 captive 3/8in –16 nut fly points
Finish:	Black Duratec™
Transport:	2 Recessed Handles
Grill:	Black powder coated steel Acoustically Transparent Foam Backing
Connectors:	XLR female (Input) XLR male (Thru) Terminal block (remote volume/mute) Locking IEC receptacles (AC IN / OUT)
AC Power Requirements:	120VAC ("-E" 230VAC) 50-60Hz 600VA
Dimensions (H x W x D):	25.75 in x 18.5 in x 14.5 in 654 mm x 470 mm x 368 mm
Net Wt:	56 lb (25.5 kg)
Rigging Accessories:	TCSHK10 3/8-16 Eyebolt TCSHK58 5/8 S

TRx2215A	
System Type:	Active 2500W Dual 15-inch 3-Way
Frequency Response:	50 Hz – 20 kHz (-10dB) 58 Hz – 18 kHz (-3dB)
Coverage Pattern:	80H x 50V
Crossover:	Tri-Amp Active DSP design
Crossover Frequency:	1.1 kHz
Power:	3200W two cycle pulse peak 2500W 20ms burst (1000W, 1000W, 500W) 1600W RMS (625W, 625W, 350W)
Input Sensitivity:	1.4Vrms to full power
Maximum Input signal:	+12dBu
Maximum SPL:	135dB Peak
LF Driver:	two 15-inch cast frame, 3-inch VC
HF Driver:	1.4-inch exit, 2.5-inch VC
Enclosure:	13-Ply Premium Russian Baltic Birch
Suspension/Mounting:	12 captive 3/8in –16 nut fly points
Finish:	Black Duratec™
Transport:	2 Recessed Handles
Grill:	Black powder coated steel Acoustically Transparent Foam Backing
Connectors:	XLR female (Input) XLR male (Thru) Terminal block (remote volume/mute) Locking IEC receptacles (AC IN / OUT)
AC Power Requirements:	120VAC ("-E" 230VAC) 50-60Hz 600VA
Dimensions (H x W x D):	41.5 in x 19 in x 20.5 in 1054 mm x 482 mm x 521 mm
Net Wt:	92.4 lb (42 kg)
Rigging Accessories:	TCSHK10 3/8-16 Eyebolt TCSHK58 5/8 Shackle

TRx2153A	
System Type:	Active 2500W 15 Inch 3-Way
Frequency Response:	50 Hz – 20 kHz (-10dB) 60 Hz – 18 kHz (-3dB)
Coverage Pattern:	80H x 50V
Crossover:	Tri-Amp Active DSP
Crossover Frequency:	500Hz, 1.1 kHz
Power:	3500W two cycle pulse peak 2500W 20ms burst (1500W, 500W, 500W) 1850W RMS (1150W, 350W, 350W)
Input Sensitivity:	1.4Vrms to full power
Maximum Input signal:	+12dBu
Maximum SPL:	134dB Peak
LF Driver:	15-inch cast frame, 3-inch VC
MF Driver:	8-inch, 2-inch VC
HF Driver:	1.4-inch exit, 2.5-inch VC
Enclosure:	13-Ply Premium Russian Baltic Birch
Suspension/Mounting:	12 captive 3/8in –16 nut fly points
Finish:	Black Duratec™
Transport:	4 Recessed Handles
Grill:	Black powder coated steel Acoustically Transparent Foam Backing
Connectors:	XLR female (Input) XLR male (Thru) Terminal block (remote volume/mute) Locking IEC receptacles (AC IN / OUT)
AC Power Requirements:	120VAC ("-E" 230VAC) 50-60Hz 600VA
Dimensions (H x W x D):	41.5 in x 19 in x 17 in 1054 mm x 482 mm x 432 mm
Net Wt:	82.6 lb (37.5 kg)
Rigging Accessories:	TCSHK10 3/8-16 Eyebolt TCSHK58 5/8 Shackle



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: Appliance should not be used near water (near a bathtub, washbowl, sink, laundry tub, in a wet basement, near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

POWER SOURCES: The product should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

GROUNDING OR POLARIZATION: Precautions should be taken so that the grounding or polarization is not defeated.

POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs.

SERVICING: The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

SAFETY INSTRUCTIONS (EUROPEAN)

The conductors in the AC power cord are colored in accordance with the following code.

GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live

U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

LIMITED WARRANTY

Your Carvin Audio loudspeaker is guaranteed against failure for 5 YEARS unless otherwise stated. Carvin Audio will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN AUDIO DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin Audio assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for Carvin any liability in connection with the sale or servicing of Carvin Audio products.

CARVIN AUDIO SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

MAINTAINING YOUR EQUIPMENT

Avoid spilling liquids or allowing any other foreign matter inside the unit. The panel of your unit can be wiped with a dry or slightly damp cloth in order to remove dust and bring back the new look. As with all pro gear, avoid prolonged use in caustic environments (salt air). When used in such an environment, be sure the amplifier is adequately protected.

SERVICE:

In the USA, please go to www.carvinaudio.com
under "SUPPORT" click on "REPAIR INFORMATION"

Outside the USA:
contact your dealer or go to http://www.carvinaudio.com
click on "DEALERS" for your nearest service center.

Include a written description of the problem with serial number and date of purchase.

CAUTION

RISK OF ELECTRIC SHOCK

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!